

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A packet based display interface arranged to couple a multimedia source device to a multimedia sink device, comprising:
a transmitter unit coupled to the source device arranged to receive a source video data stream containing video data in accordance with a native video data rate and to segregate the video data into data packets and control packets, the transmitter coupled to a cable, [[:]]
a receiver unit coupled to the sink device; and
a linking unit the cable coupling the transmitter unit to [[and]]a the receiver unit, the transmitter unit arranged to transfer the video data in the form of a number of main link characters at a link character clock rate that is independent of the native video data stream-rate such that video data and the link character clock rates are asynchronous to each other, wherein the cable further comprises:
a uni-directional main link line arranged to carry only the data packets from the transmitter unit to the receiver unit; and
a bi-directional auxiliary channel line arranged to carry the control packets between the transmitter unit and the receiver unit and vice versa.
2. (Currently Amended) A packet based display interface as recited in claim 1, wherein the uni-directional main link line contains multimedia data packet stream is one of a number of multimedia data packet streams each having an associated adjustable data stream link rate that is independent of the native video stream rate.
3. (Canceled).
4. (Currently Amended) A display interface as recited in claim 1 [[3]], wherein the bi-directional auxiliary channel line is formed of a uni-directional back channel configured to carry information from the multimedia sink device to the multimedia source device and a uni-directional forward channel included as part of the main channel for carrying information from the multimedia source device to the multimedia sink device in concert with the back channel.

5. (Currently Amended) A display interface as recited in claim 2, wherein the uni-directional main link line unit further comprises:

a number of virtual links each being associated with a particular one of the multimedia multi-media data packet streams wherein each of said virtual links has an associated virtual link bandwidth and a virtual link rate.

6. (Original) A display interface as recited in claim 5, wherein a main link bandwidth is at least equal to an aggregate of the virtual link bandwidths.

7. (Currently Amended) A display interface as recited in 5 [[1]], wherein the source video data stream is packetized over a [[the]] respective virtual link based upon a mapping definition.

8. (Currently Amended) A method of coupling a multimedia source device to a multimedia sink device, comprising:

receiving source video data in accordance with a native video data rate;

transferring the video data from a transmitter unit to a display in the form of a number of main link characters at a link character clock rate that is independent of the native stream rate such that video data and the link character clock are asynchronous to each other, wherein the video data is transferred solely over a uni-directional main link line of a cable connected to the display; and

transferring information regarding the video data to the display over a bi-directional auxiliary channel line of the cable.

9. (Currently Amended) A method as recited in claim 8, wherein the uni-directional main link line contains multimedia data packet stream is one of a number of multimedia data packet streams each having an associated adjustable data stream link rate that is independent of the native video stream rate.

10. (Canceled).

11. (Currently Amended) A method as recited in claim 8 [[10]], wherein the bi-directional auxiliary channel line is formed of a uni-directional back channel configured to carry information from the multimedia sink device to the source device and a uni-directional forward

channel ~~included as part of the main channel~~ for carrying information from the multimedia source device to the multimedia sink device in concert with the uni-directional back channel.

12. (Currently Amended) A method as recited in claim 8, wherein the uni-directional main link line ~~main-link unit~~ further comprises:

a number of virtual links each being associated with a particular one of the multimedia ~~multi-media~~ data packet streams wherein each of said virtual links has an associated virtual link bandwidth and a virtual link rate.

13. (Original) A method as recited in claim 12, wherein a main link bandwidth is at least equal to an aggregate of the virtual link bandwidths.

14. (Currently Amended) A method as recited in claim 12 ~~[[8]]~~, wherein the source video data stream is packetized over a ~~[[the]]~~ respective virtual link based upon a mapping definition.

15. (Currently Amended) Computer program product for coupling a multimedia source device to a multimedia sink device, comprising:

computer code for receiving source video data in accordance with a native video data rate;

computer code for transferring the video data from a transmitter to a display in the form of a number of main link characters at a link character clock rate that is independent of the native stream rate such that video data and the link character clock are asynchronous to each other, wherein the video data is transferred solely over a uni-directional main link line of a cable connected between the transmitter and the display; and

transferring information regarding the video data to the receiver unit over a bi-directional auxiliary channel line of the cable; and

computer readable medium for storing the computer code.

16. (Currently Amended) Computer program product as recited in claim 15, wherein the uni-directional main link line contains multimedia data packet stream is one of a number of multimedia data packet streams each having an associated adjustable data stream link rate that is independent of the native video stream rate.

17. (Canceled).

18. (Currently Amended) Computer program product as recited in claim 15 [[17]], wherein the bi-directional auxiliary channel line is formed of a uni-directional back channel configured to carry information from the multimedia sink device to the multimedia source device and a uni-directional forward channel ~~included as part of the main channel~~ for carrying information from the multimedia source device to the multimedia sink device in concert with the uni-directional back channel.

19. (New) The packet based display interface as recited in claim 1, wherein the transmitter and the receiver are not connected by a clock line.

20. (New) The method as recited in claim 8, wherein the transmitter and the display are not connected by a clock line.

21. (New) The computer program product as recited in claim 15, wherein the transmitter and the display are not connected by a clock line.

22. (New) A computer chip configured to
receive source video data in accordance with a native video data rate;
transfer the video data in the form of a number of main link characters at a link character clock rate that is independent of the native stream rate such that video data and the link character clock are asynchronous to each other, wherein the video data is transferred solely over a uni-directional main link line of a cable connected to a receiver unit; and
transfer information regarding the video data to the receiver unit over a bi-directional auxiliary channel line of the cable.